means for transmitting signals to said broadcast station in a format including receive state information indicating a sequence number of the last in sequence of the received frames, but not including a transmit state field.

REMARKS

The Office Action dated September 12, 2000, and the patents and documents cited therein have been carefully reviewed, and in view of the above changes and following remarks reconsideration and allowance of all the claims pending in the application are respectfully requested.

The Election/Restriction Requirement

Claims 39-50 stand withdrawn from consideration because Applicants have received an Office Action on the merits for the originally-presented invention and newly added claims 39-50 purportedly are directed to an invention that is independent or distinct from the invention originally claimed. Moreover, the Examiner states that the "new limitation in claims 39-50 is distinct among other distinct inventions disclosed in the present specification pages 2-5."

Applicants respectfully submit that claims 39-50 are not directed to an invention that is distinct from **and** independent of the invention previously claimed, as required by 37 C.F.R. § 1.145. Applicants submit that 37 C.F.R. § 1.145 requires that "[i]f, after an office action on an application, the applicant presents claims directed to an invention

distinct from and independent of the invention previously claimed, the applicant will be required to restrict the claims to the invention previously claimed ... ." [Emphasis added.]

Applicants fully agree with the Examiner that claims 39-50 are directed to an invention that is distinct from the invention of their respective base claims. The distinctive nature of the invention of claims 39-50 can clearly be seen by the fact that each respective claim is dependent from a base claim that has been previously presented. For example, claim 39 depends from previously-presented claim 1; claim 40 depends from previously-presented claim 3; claim 41 depends from previously-presented claim 5; etc.

Moreover, because each of claims 39-50 is dependent on a previously-presented base claim, the independent nature of the respective inventions of claims 39-50 with respect to the previously-presented base claims is plainly lacking. For example, the invention of claim 39 is not independent of claim 1 because the invention of claim 39 requires all of the limitations that are required by the invention of claim 1.

Applicants respectfully submit that 37 C.F.R. § 1.145 requires that **both** qualities (i.e., distinct from and independent) be present before an applicant will be required to restrict the claims to the invention previously claimed when, after an office action on an application, the applicant presents claims directed to an invention distinct from and independent of the invention previously claimed. To only require that a dependent claim, submitted after an office action on an application, be directed to an invention that is distinct from a previously-presented invention would essentially preclude all dependent claims from being submitted after an office action on the application.

Thus, Applicants respectfully traverse the election requirement in which the Examiner has withdrawn claims 39-50 from consideration. Moreover, Applicants respectfully request that the Examiner reconsider the restriction requirement and re-enter claims 39-50 for consideration.

Because Applicants urge the Examiner to reconsider the restriction requirement, the following remarks with respect to the various rejections based on cited patents and publications will include comments directed to claims 39-50 with respect to the rejections based on art.

The Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 5-8 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and claim the subject mater regarded as the invention.

Applicants have amended claims 5 and 7 to improve their respective forms in accordance with U.S. patent laws. Accordingly, Applicants respectfully submit that the "said plural number of times" appearing at line 11 of claim 5 (Twice amended) has antecedent basis in the claimed " plural number" appearing at line 9 of claim 5 (Twice amended). Thus, the claimed means for rebroadcasting of claim 5 should be understood to be operative, when a plural number of the claimed error correction request signals indicating the same selected frame are received within a predetermined period, to rebroadcast the same selected frame less than the claimed plural number of times that the

error correction request signals indicating the same selected frame are received within the predetermined period of time.

Similarly, the "said plural number of times" appearing at line 9 of claim 7 (Twice amended) has antecedent basis in the claimed " plural number" appearing at lines 6-7 of claim 7 (Twice amended). Thus, method of claim 7 should be understood to include that when a plural number of the claimed error correction request signals indicating the same selected frame are received within a predetermined period, the step of retransmitting the selected frames comprises rebroadcasting the same selected frame less than the claimed plural number of times that the error correction request signals indicating the same selected frame are received within the predetermined period of time.

Applicants respectfully submit that both claims 6 and 8 should now be definite in view of the respective amendments to claims 5 and 7. Further, in view of the Applicants' traversal of the withdrawal of claims 41 and 42 from consideration based on the restriction requirement, Applicants respectfully submit that claims 41 and 42 should also now be definite.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 5-8, 41 and 42.

The Rejection Under 35 U.S.C. § 103(a) Over Spragins In View Of Fujikura

Claims 19-23 and 27-30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Spragins et al. (Spragins) (Telecommunications Protocols and Design, Addison-

Wesley Publishing Company, July 1992) in view of Fujikura et al. (Fujikura), U.S. Patent No. 4,901,313.

In view of the Applicants' traversal of the withdrawal of claims 47-50 from consideration based on the restriction requirement, the following remarks regarding the rejection based on Spragins in view of Fujikura will include remarks directed to the patentability of claims 47-50.

Applicants respectfully submit that the present invention according to any of claims 19- 23, 27-30 and 47-50 is patentable over Spragins in view of Fujikura. Applicants respectfully submit that the applied patents are not properly combinable to form a basis for rejection of these claims. Further, the device and method resulting from the proposed combination is not the present invention.

Contrary to the Examiner's statement, there is no suggestion in either Spragins or Fujikura "to provide the broadcast of Fujikura to the system of Spragins in order to conserve system's bandwidth." In fact, Applicants respectfully submit that the Examiner's proffered motivation, i.e., to conserve the system bandwidth of Spragins, does not make sense in view of the actual disclosure of each reference. Specifically, the Spragins system exemplified by Figure 7.13(b) already conserves system bandwidth by retransmitting "[o]nly the erroneous frame". (See Spragins, page 328, lines 31-33, and Figure 7.13(b).) The Fujikura a-point-to-multi-point broadcast system conserves system bandwidth by providing a master station that only retransmits a frame having a sequence number

indicated by a received retransmission request frame as being abnormally received by a slave station. (See Fujikura, column 7, lines 4-31.)

Thus, Applicants respectfully submit that the combination of Spragins in view of Fujikura would not be formed by one of ordinary skill in the art particularly based on the concept of conserving system bandwidth, and that neither Spragins nor Fujikura suggest the combination proposed by the Examiner. Moreover, even if the proposed combination of Spragins in view of Fujikura is formed (or for that matter, if Fujikura were considered alone), the resulting device and method is not the present invention according to at least any of claims 19-23 and 47-50.

Regarding claim 19, Applicants respectfully submit that Spragins does not disclose an apparatus for receiving data from a broadcast station having means for transmitting to the broadcast station at predetermined intervals an error status signal. At best, Spragins discloses a poll bit P set by a station acting as a primary must be paired with an F bit received from the other station (acting as a secondary) before another P bit can be sent, and vice versa. (See Spragins, p 328, lines 1-3.) Nevertheless, according to Spragins, the nature of the error that the error correction request signal is used for is a random event. Based on the random nature of an error event, it follows that Spragins does not transmit the error correction request signal at predetermined intervals. Moreover, Spragins provides insufficient disclosure to fairly conclude that the poll bit P is transmitted at the claimed predetermined intervals so that a secondary station has the claimed means for transmitting to a primary station at predetermined intervals an error status signal.

Regarding Fujikura, Fujikura discloses that a slave station transmits a response frame based on a calculated timing decision that is a function of the send sequence number of a received frame. (See Fujikura, column 5, lines 33-54, and column 9, lines 7-18.) Moreover, when a slave station receives a-point-to-multi-point frame that is not addressed to the slave station, the slave station "erases" the received frame. (See Fujikura, column 8, lines 51-56.) Additionally, a Fujikura master station transmits all frames stored in buffer 204 without waiting for a response from individual slave station. (See Fujikura, column 12, lines 5-10.) In view of the disclosure by Fujikura, the sequence send number, as seen and used a slave station, undoubtedly cannot be considered to provide the claimed periodic intervals.

Fujikura also discloses that a slave station transmits a retransmission request frame whenever a-point-to-multi-point frame is abnormally received. Specifically, when an abnormally-received frame is detected, the slave station generates a retransmission request frame, which is placed in a buffer 308, and a transmitting interface 309 reads the retransmission frame out of buffer 308 in a first-in, first-out (FIFO) manner. (See Fujikura, column 5, lines 55-59, column 9, lines 21-48, and column 12, lines 15-22.) Plainly, a Fujikura retransmission request frame is not sent on a periodic interval.

Therefore, Fujikura does not provide a slave station that has the claimed means for transmitting to a central station at predetermined intervals an error status signal that indicates whether error correction information is required from the central station.

Thus, claim 19 is patentable over Spragins in view of Fujikura. It follows that claims 20, 21 and 47, which each incorporate the limitations of claim 19, are each patentable over Spragins in view of Fujikura for at least the same reasons that claim 19 is considered allowable.

Applicants respectfully submit that claim 22 is patentable over Spragins in view of Fujikura for reasons that are similar to the reasons that claim 19 is considered patentable. That is , neither Spragins nor Fujikura disclose or suggest a method having a step of transmitting to a broadcast station at predetermined intervals an error status signal which indicates whether error correction information is required from a central station. It follows that claims 23, 24 and 48, which each incorporate the limitations of claim 22, are patentable over Spragins in view of Fujikura for at least the same reasons that claim 22 is considered patentable.

Thus, Applicants respectfully submit that it is only by impermissible hindsight that the Examiner is able to reject claims 19-23, 27-30 and 47-50 based on the combination of Spragins and Fujikura. Neither of the applied references provide a proper suggestion for combination. It is only by the Applicants disclosure that the Examiner can select particular features of Spragins and Fujikura to make the rejection.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 19-23, 27-30 and 47-50.

The Rejection Under 35 U.S.C. § 103(a) Over Wiedeman In View Of Smolinske And Fujikura

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Wiedeman, U.S. Patent No. 5,303,286) in view of Smolinske et al. (Smolinske), U.S. Patent No. 4,901,313, and Fujikura.

In view of the Applicants' traversal of the withdrawal of claims 39 and 40 from consideration based on the restriction requirement, the following remarks regarding the rejection based on Wiedeman in view of Smolinske and Fujikura will include remarks directed to the patentability of claims 39 and 40.

Applicants respectfully submit that the present invention according to any of claims 1-4, 39 and 40 is patentable over Wiedeman in view of Smolinske and Fujikura. Applicants respectfully submit that the applied patents are not properly combinable to form a basis for rejection of these claims.

Contrary to the Examiner statement, there is no suggestion in Wiedeman or Smolinske "to provide the broadcast for Fujikura to the system of Wiedeman in order to conserve bandwidth." Applicants respectfully submit that there is no disclosure in Wiedeman or Smolinske relating to broadcasting of data from a central station to a plurality of location stations, as the term "broadcasting" is understood in the art. Moreover, Wiedeman relates to a point-to-point communication system while Fujikura relates to a-point-to-multi-point communication system. (See Wiedeman, column 3, line 54, through column 4, line 1, and Fujikura, column 4, line 64, through column 5, line 1.)

Further, Wiedeman provides no disclosure that system bandwidth is a problem and, accordingly, no disclose providing techniques conserving system bandwidth.

Thus, Applicants respectfully submit that the proffered combination of Wiedeman, Smolinske and Fujikura is formed by impermissible hindsight because none of Wiedeman, Smolinske and Fujikura suggests the combination.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 1-4, 39 and 40

The Rejection Under 35 U.S.C. § 103(a) Over Smolinske In View Of Spragins And Fujikura

Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Smolinske in view of Spragins and Fujikura.

Applicants have amended claim 10 to improve its form in accordance with U.S. patent laws, and for consistency with the specification.

In view of the Applicants' traversal of the withdrawal of claims 43 and 44 from consideration based on the restriction requirement, the following remarks regarding the rejection based on Smolinske in view of Spragins and Fujikura will include remarks directed to the patentability of claims 43 and 44.

Applicants respectfully submit that the present invention according to any of claims 9, 10, 43 and 44 is patentable over Smolinske in view of Spragins and Fujikura. Applicants respectfully submit that even if the applied patents are properly combinable to

form a basis for rejection of these claims., the device and method resulting from the proposed combination is not the present invention.

Specifically regarding claim 9, none of Smolinske, Spragins and Fujikura disclose or suggest an apparatus for broadcasting data to a plurality of data receiving stations having the claimed means for broadcasting that is operable to broadcast a new frame which has not been previously broadcast only if a sequential order of the new frame is not greater than a sequence order of the earliest of the frames which has been indicated to not have been received by any one of the receiving stations by a predetermined number. Essentially, the invention of claim 9 includes a "sliding window" that restricts that difference between the sequence number of new frames that are to be transmitted and the lowest sequence number of a frame transmitted, but not correctly received by all stations. Applicants respectfully submit that to conclude that Figures 7.13a and 7.13b provide the invention of claim 9 is without basis. Spragins plainly provides no disclosure that a central station includes a sliding window that broadcasts a new frame that has not been previously broadcast only if a sequential order of the new frame is not greater than a sequence order of the earliest of the frames that has been indicated to not have been received by any one of the receiving stations by a predetermined number.

Thus, Applicants submit that claim 9 is patentable over Smolinske in view of Spragins and Fujikura. It follows that claim 43, which incorporates the limitations of claim 9, is patentable over Smolinske in view of Spragins and Fujikura for at least the same reasons that claim 9 is considered allowable.

Applicants respectfully submit that claim 10 is allowable for reasons that are similar to the reasons that claim 9 is considered allowable. It follows that claim 44, which incorporates the limitations of claim 10, is patentable over Smolinske in view of Spragins and Fujikura for at least the same reasons that claim 10 is considered allowable.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 9, 10, 43 and 44.

The Rejection Under 35 U.S.C. §103(a) Over Smolinske In View Of Ellis and Fujikura

Claims 11-16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Smolinske in view of Ellis et al. (Ellis), U.S. Patent No. 5,497,371, and Fujikura.

In view of the Applicants' traversal of the withdrawal of claims 45 and 46 from consideration based on the restriction requirement, the following remarks regarding the rejection based on Smolinske in view of Ellis and Fujikura will include remarks directed to the patentability of claims 45 and 46.

Applicants respectfully submit that the present invention according to any of claims 11-16, 45 and 47 is patentable over Smolinske in view of Ellis and Fujikura. Applicants respectfully submit that the applied patents are not properly combinable to form a basis for rejection of these claims. Applicants respectfully submit that to proffer a motivation to combine Smolinske with Fujikura that is based on conserving system bandwidth without specifically pointing out where in Smolinske concerns regarding system bandwidth are set forth is really nothing more than hindsight. It is only by the Applicants' disclosure that the

Examiner can select particular features of Smolinske, Ellis and Fujikura to make the rejection.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 11-16, 45 and 46.

The Rejection Under 35 U.S.C. § 103(a) Over Weideman In View Of Smolinske and Spragins, Ellis and Fujikura

Claims 31/1/2, 31/9, 31/11/12/13, 31/19/20, 31/27/28, 32/3/4, 32/10, 32/14/15/16, 32/22/23, 32/29/30, 33/9, 33/11/12/13, 33/19/20, 33/27/28, 34/10, 34/14/15/16, 34/22/23 and 34/29/30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Weideman in view of Smolinske and Spragins and Fujikura.

Applicants respectfully submit that the present invention according to any of claims 31/1/2, 31/9, 31/11/12/13, 31/19/20, 31/27/28, 32/3/4, 32/10, 32/14/15/16, 32/22/23, 32/29/30, 33/9, 33/11/12/13, 33/19/20, 33/27/28, 34/10, 34/14/15/16, 34/22/23 and 34/29/30 is patentable over Weideman in view of Smolinske and Spragins and Fujikura. As demonstrated above, each of the respective base claims are patentable over all of the various combination of art formed by the Examiner. Again, Applicants respectfully submit that it is only by the Applicants' disclosure that the Examiner can select particular features of Weideman, Smolinske, Spragins and Fujikura to make this rejection.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 31/1/2, 31/9, 31/11/12/13, 31/19/20, 31/27/28, 32/3/4, 32/10,

32/14/15/16, 32/22/23, 32/29/30, 33/9, 33/11/12/13, 33/19/20, 33/27/28, 34/10, 34/14/15/16, 34/22/23 and 34/29/30.

The Rejection Under 35 U.S.C. § 103(a) Over Spragins, Wiedeman And Fujikura

Claims 35/21, 36/24, 37/21 and 38/24 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Spragins and Wiedeman and Fujikura.

Applicants respectfully submit that the present invention according to claims 35/21, 36/24, 37/21 and 38/24 are patentable over Spragins, and Wiedeman and Fujikura. Applicants respectfully submit that it is only by the Applicants' disclosure that the Examiner can select particular features of Spragins, Wiedeman and Fujikura to make this rejection.

Consequently, Applicants respectfully request that the Examiner withdraw this rejection and allow claims 35/21, 36/24, 37/21 and 38/24.

CONCLUSION

In view of the above amendments and arguments, it is urged that the present application is now in condition for allowance. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below.

A Petition for the necessary extension of time to file this response having an authorization to charge a deposit account in payment of the applicable extension fee has been submitted concurrently with this response.

It is requested that this application be passed to issue with claims 1-16, 19-24 and 27-50.

Respectfully submitted,

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